

I-29 Exit 77 (41st Street) Crossroad Corridor Study Public Meeting/Open House April 12, 2011

Steering Committee



CONFLUENCE



Presentation outline:

- Project Area
- 2011 I-29 Reconstruction
- 2010 SDDOT Interstate Study
- I-29/41st St. Interchange Options
- 41st St./Louise Ave. Considerations
- Next Steps
- Questions and Comments

Project Area

Study
Area

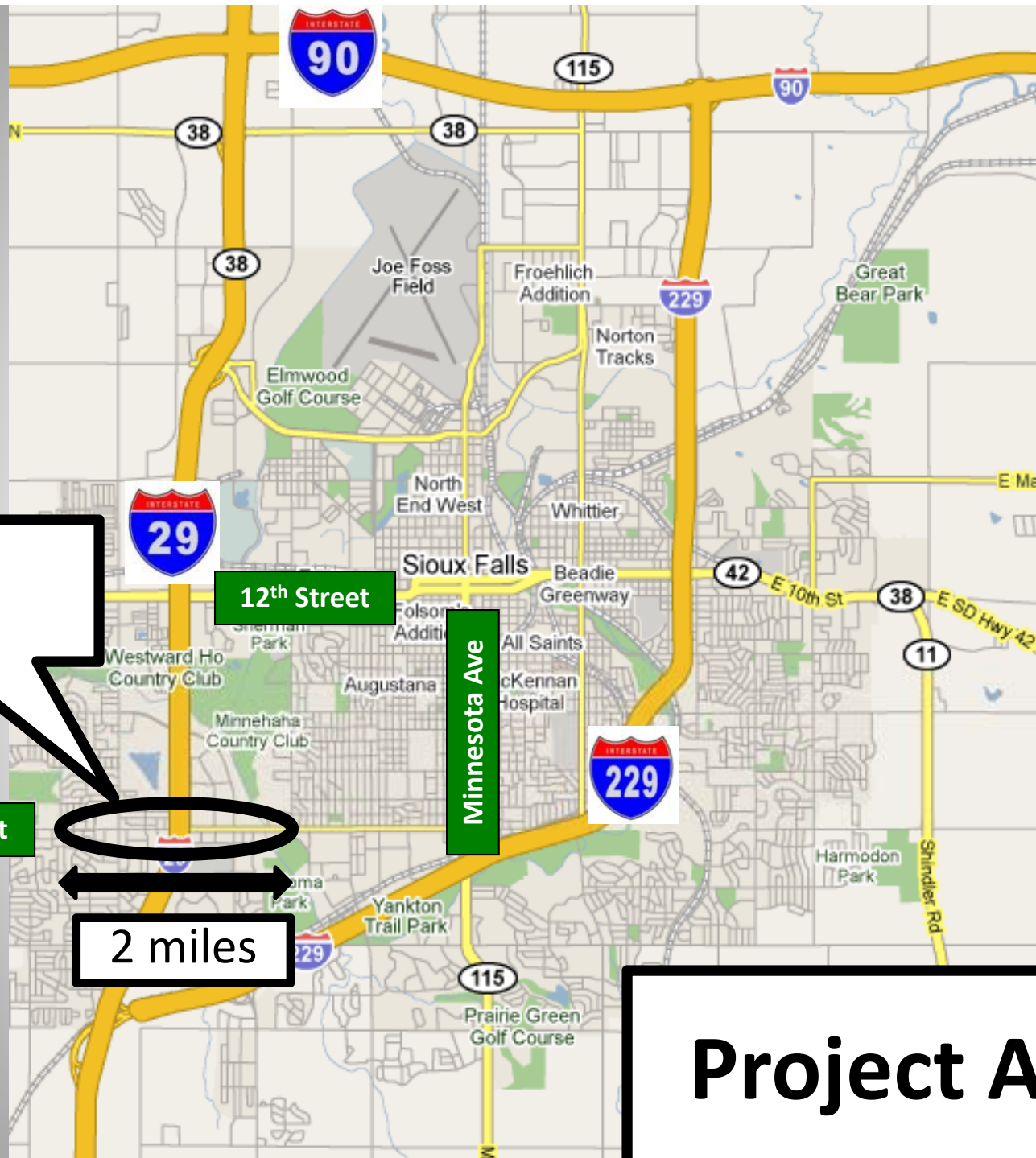
12th Street

41st Street

2 miles

Minnesota Ave

Project Area



Study Roadway



Project Area

2011
I-29 Reconstruction
Project



I-29 upgraded
to 3 lanes
2002 to 2007

I-29
upgrade
2011

I-29 New or
expanded
interchanges

- 60th St 1996/2002
- Benson Rd 2002
- Russell St 2002
- Madison St 2004
- 12th St 2006
- 26th St 1996

**I-29
Reconstruction**

I-29 Reconstruction Project

Existing

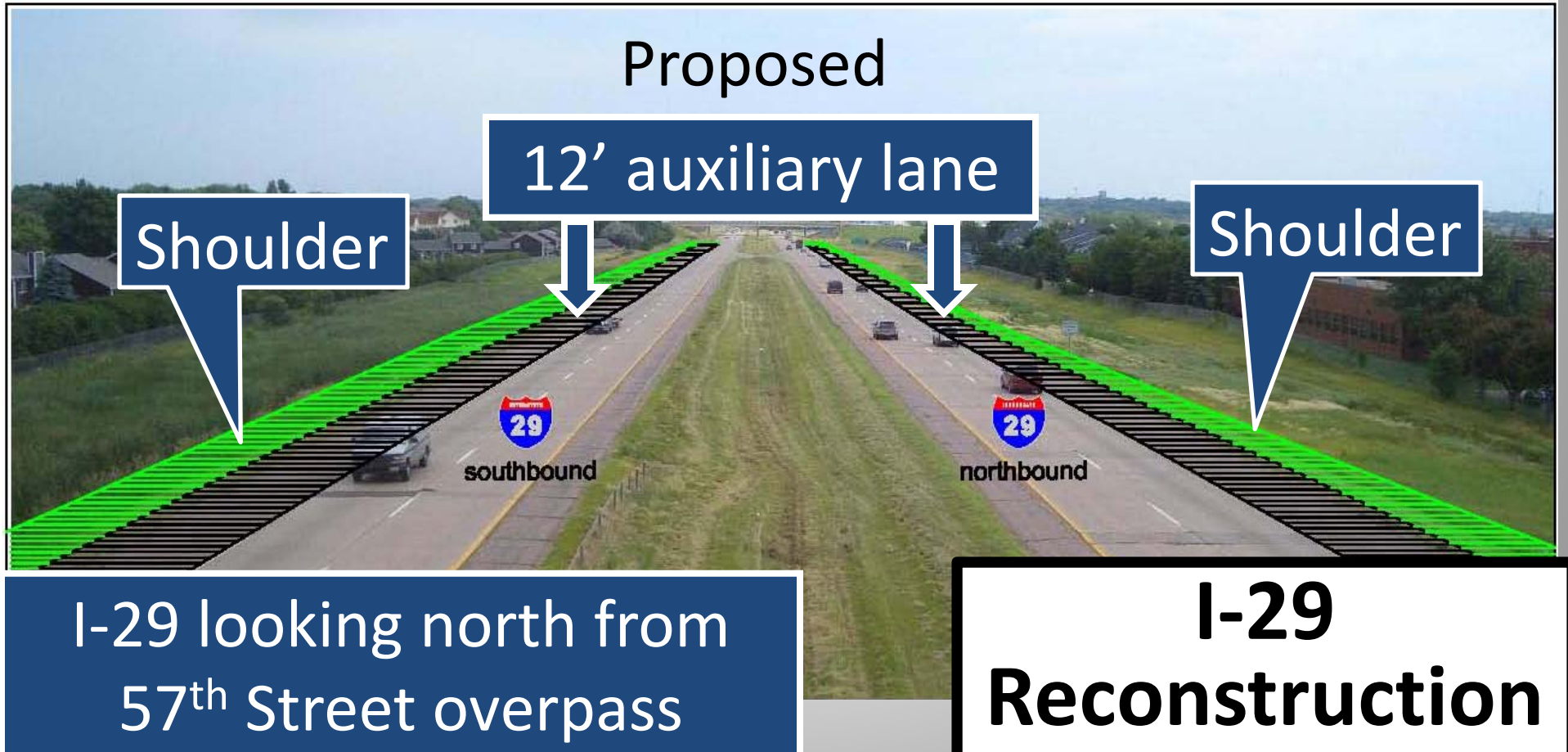


I-29 looking north from
57th Street overpass

**I-29
Reconstruction**

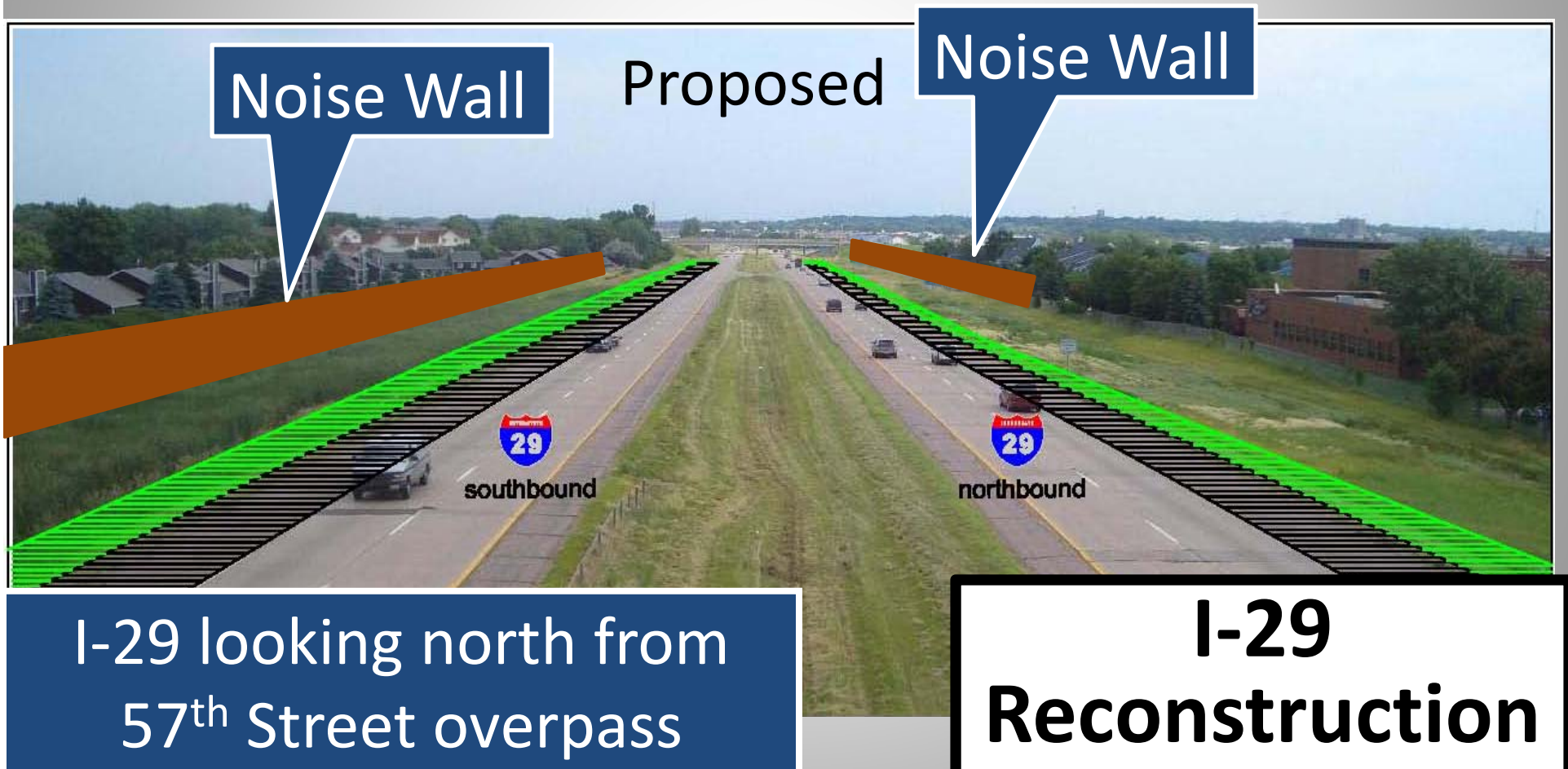
I-29 Reconstruction Project

- Add auxiliary lane from 57th St to 26th St
- Reconstruct existing through lanes
- Begin construction in 2011



I-29 Reconstruction Project

- Noise wall construction in 2011





41st Street

I-29
constructed in
1960



1962

41st Street

Bridge re-built
and widened in
1979

49th Street



57th Street

2008



**I-29
Reconstruction**

2010 SDDOT Interstate Study

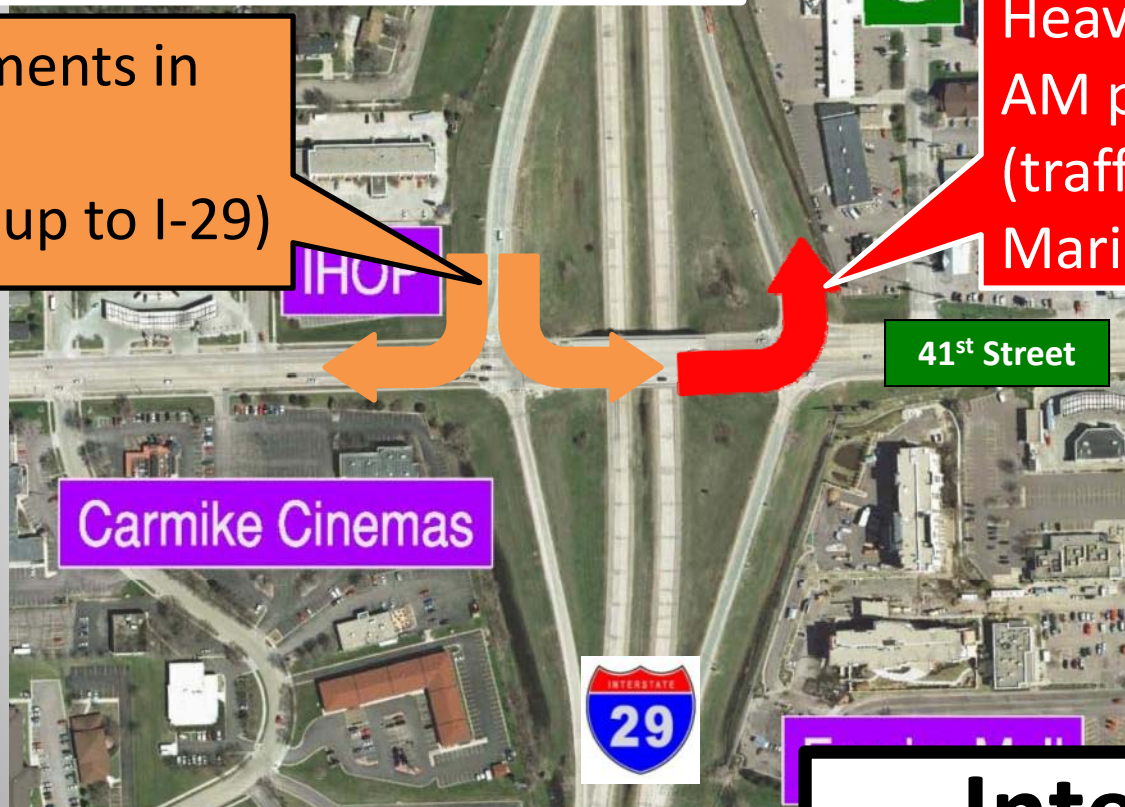
- Study is done every 10 years.
- Entire interstate system in SD is analyzed.
- Deficiencies are determined.
- Improvements are recommended.
- Analysis is from “30,000 foot level”.

I-29 Exit 77 (41st Street) Crossroad Corridor Study will develop and analyze interchange options in adequate detail to recommend the most technically feasible option(s).

Statement from study:
"The interchange currently operates at level of service E in the AM peak hour and level of service F in the PM peak hour at both ramp terminal intersections."

Heavy movements in
PM peak
(traffic backs up to I-29)

Heavy movement in
AM peak
(traffic backs up to
Marion Road)



Traffic will increase by year 2035.

**Interstate
Study**



A – Normal speeds, large gaps between vehicles



D – Slightly reduced vehicle speeds, no delays



B – Normal speeds, smaller gaps between vehicles



E – Reduced vehicle speeds, some delays



C – Normal speeds, no delays



F – Stop and go conditions, long delays

Level of Service Summary

*Source: Highway Capacity
Manual*

Interstate Study



Video clip
41st/I-29 northbound ramp

**Interstate
Study**

Interchange Options

Criteria:

- Provide acceptable level of service for future conditions.
- Minimal or no property impacts

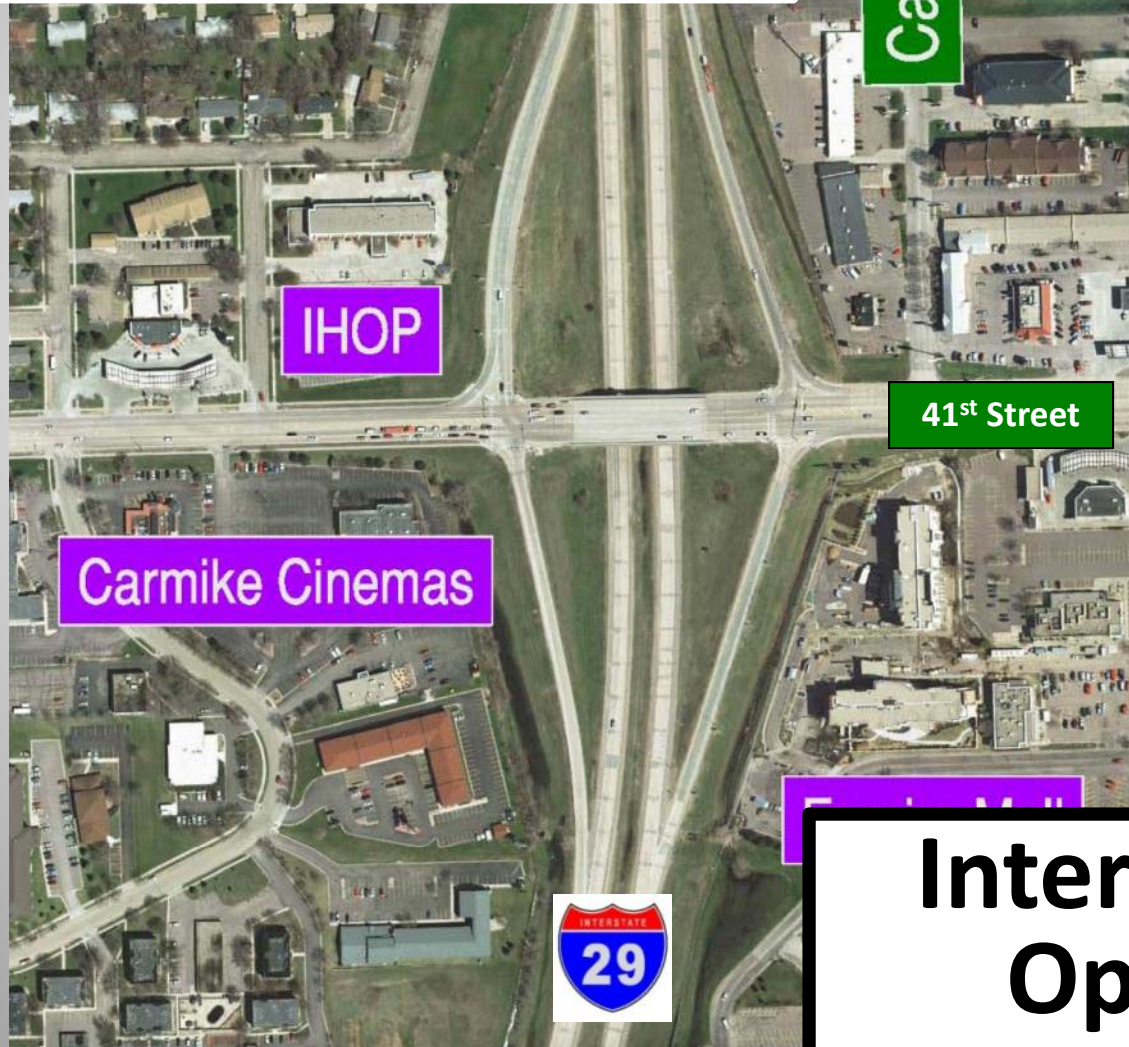
Timeframe:

- Unknown
- Existing bridge has many years of service life.

**Interchange
Options**

Interchange options from study:

- Single point interchange
- Diverging diamond interchange



Interchange Options

Example of single point interchange



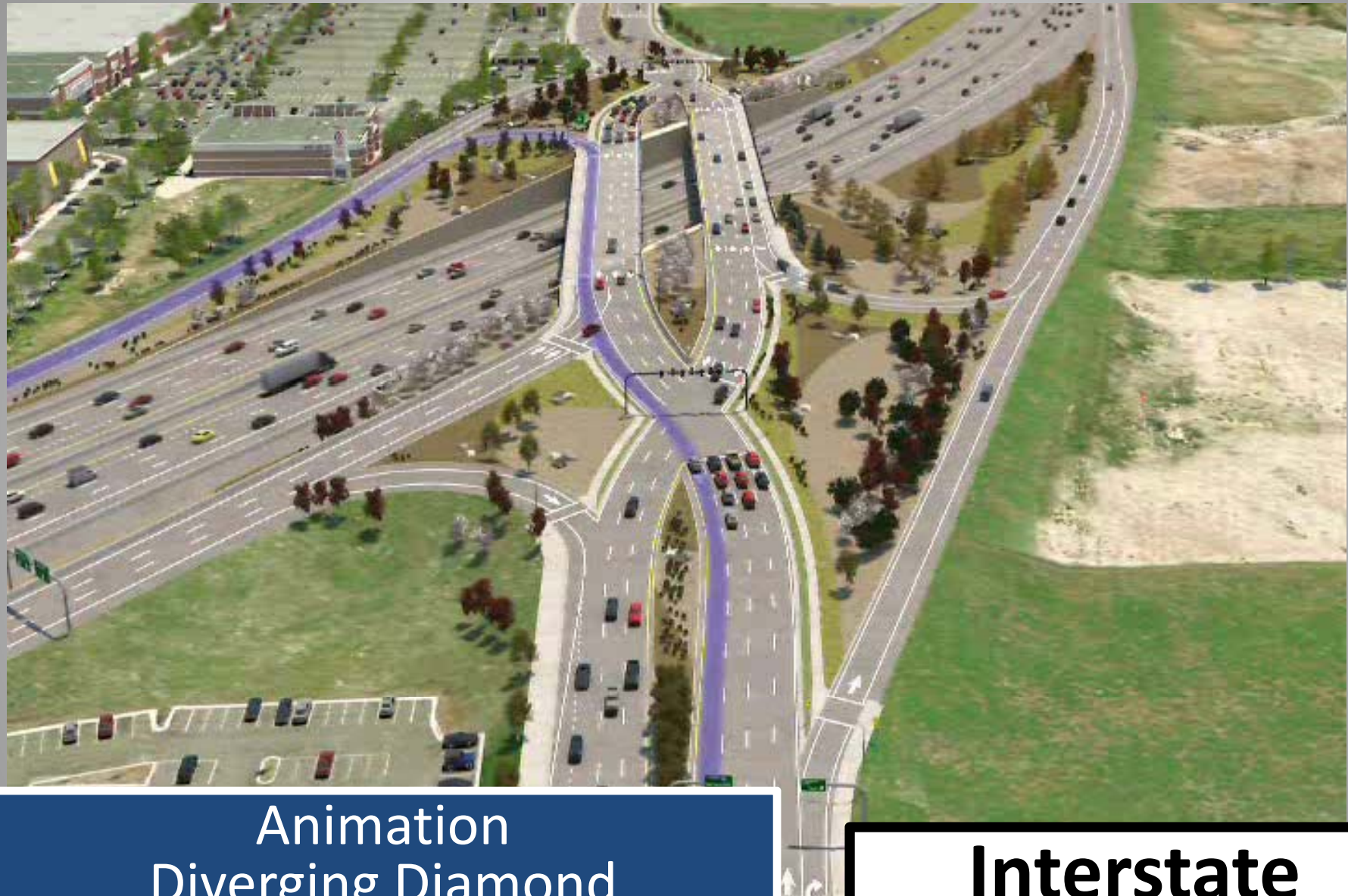
**Interchange
Options**

Example of diverging diamond interchange

4 have been built in US
20+ are planned



**Interchange
Options**

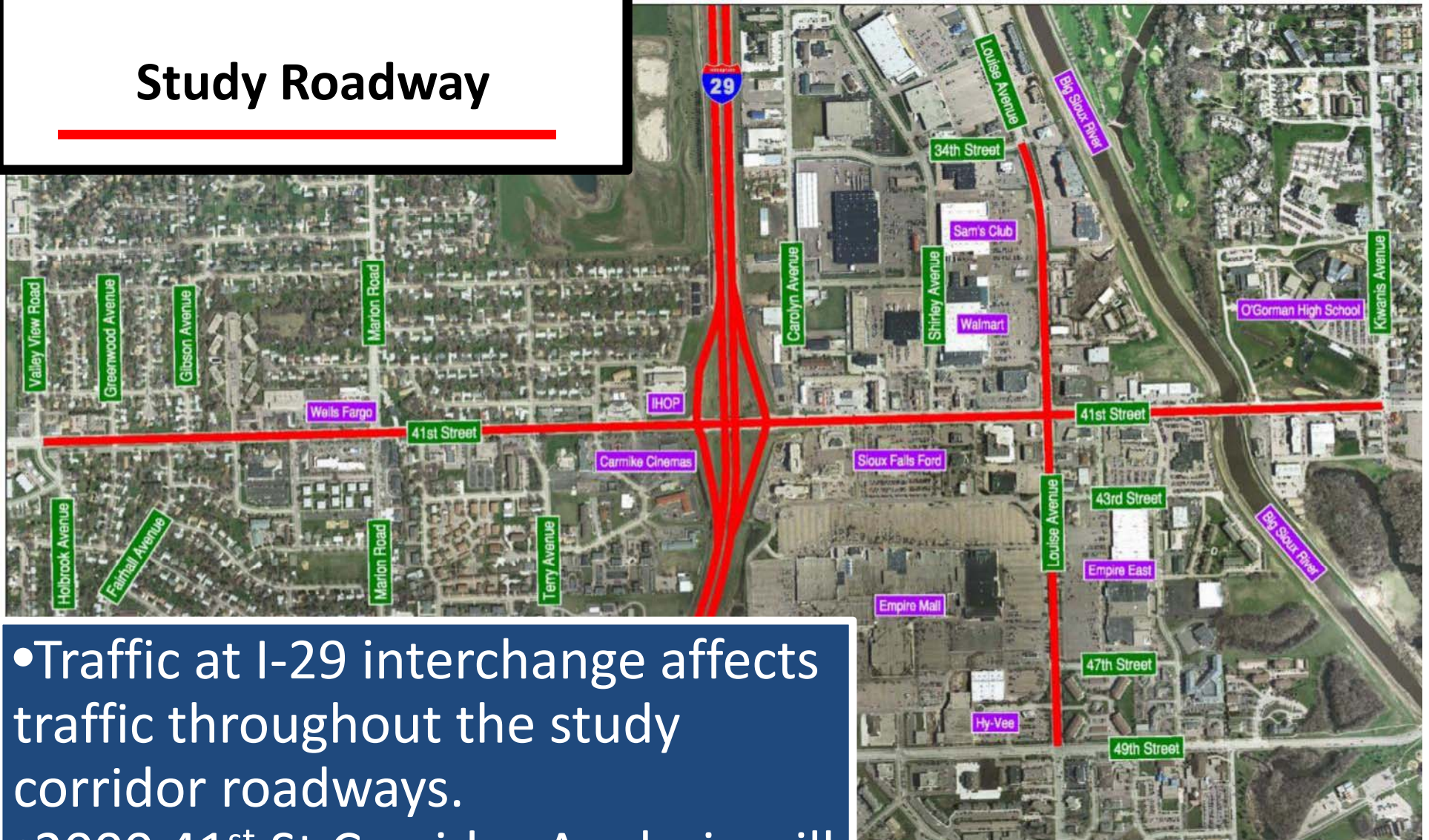


Animation
Diverging Diamond
Interchange

**Interstate
Study**

41st Street/Louise Avenue Considerations

Study Roadway



- Traffic at I-29 interchange affects traffic throughout the study corridor roadways.
- 2000 41st St Corridor Analysis will be used as background information.

**41st Street
Louise Avenue**

Primary Considerations

Capacity

Safety

Access

Other Considerations

Pedestrians and
bicyclists

Transit

Aesthetics

Timeframe: 5 to 20 years

41st Street
Louise Avenue

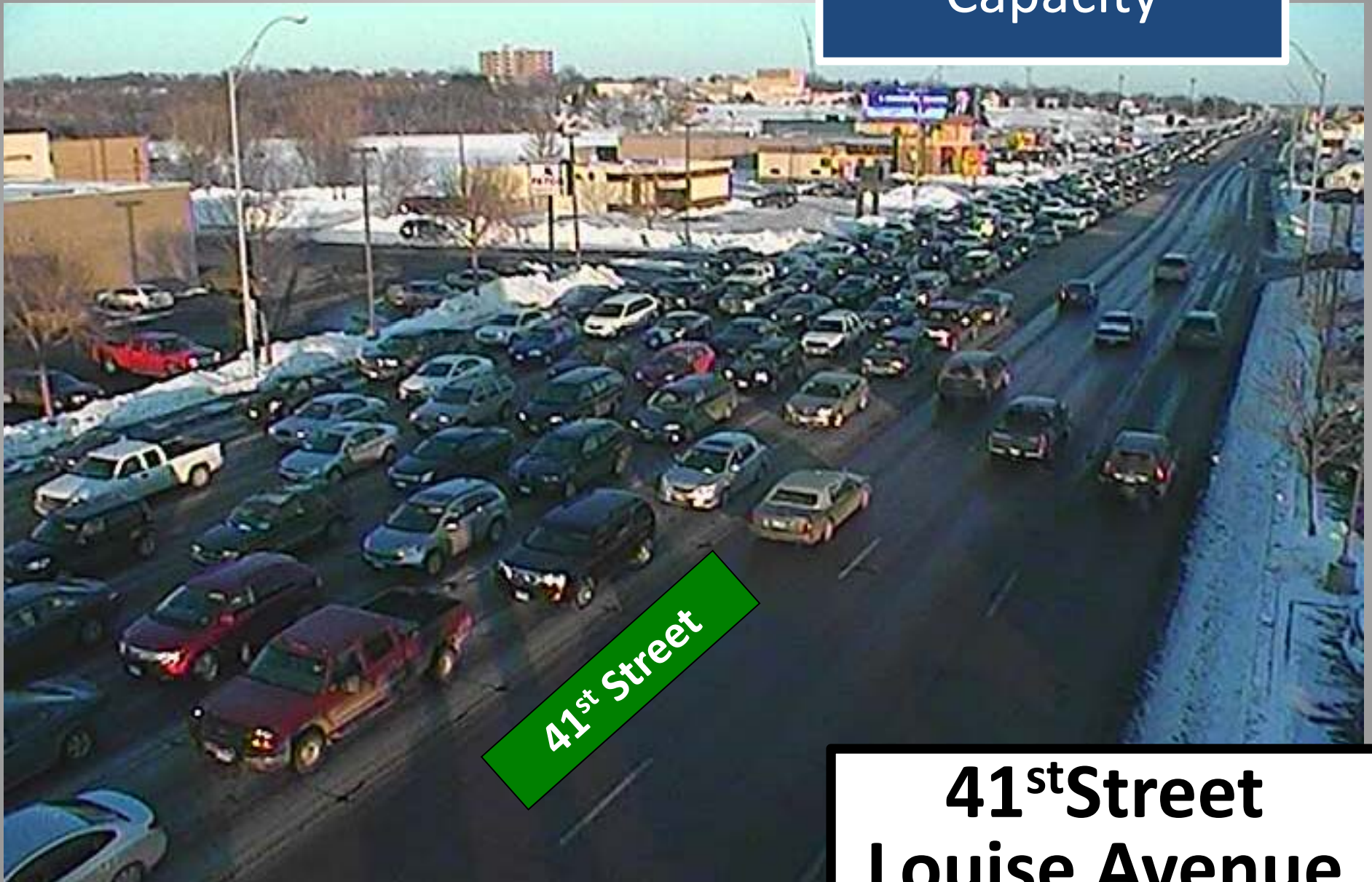


Capacity

Louise Ave

41st Street
Louise Avenue

Capacity



41st Street

41st Street
Louise Avenue

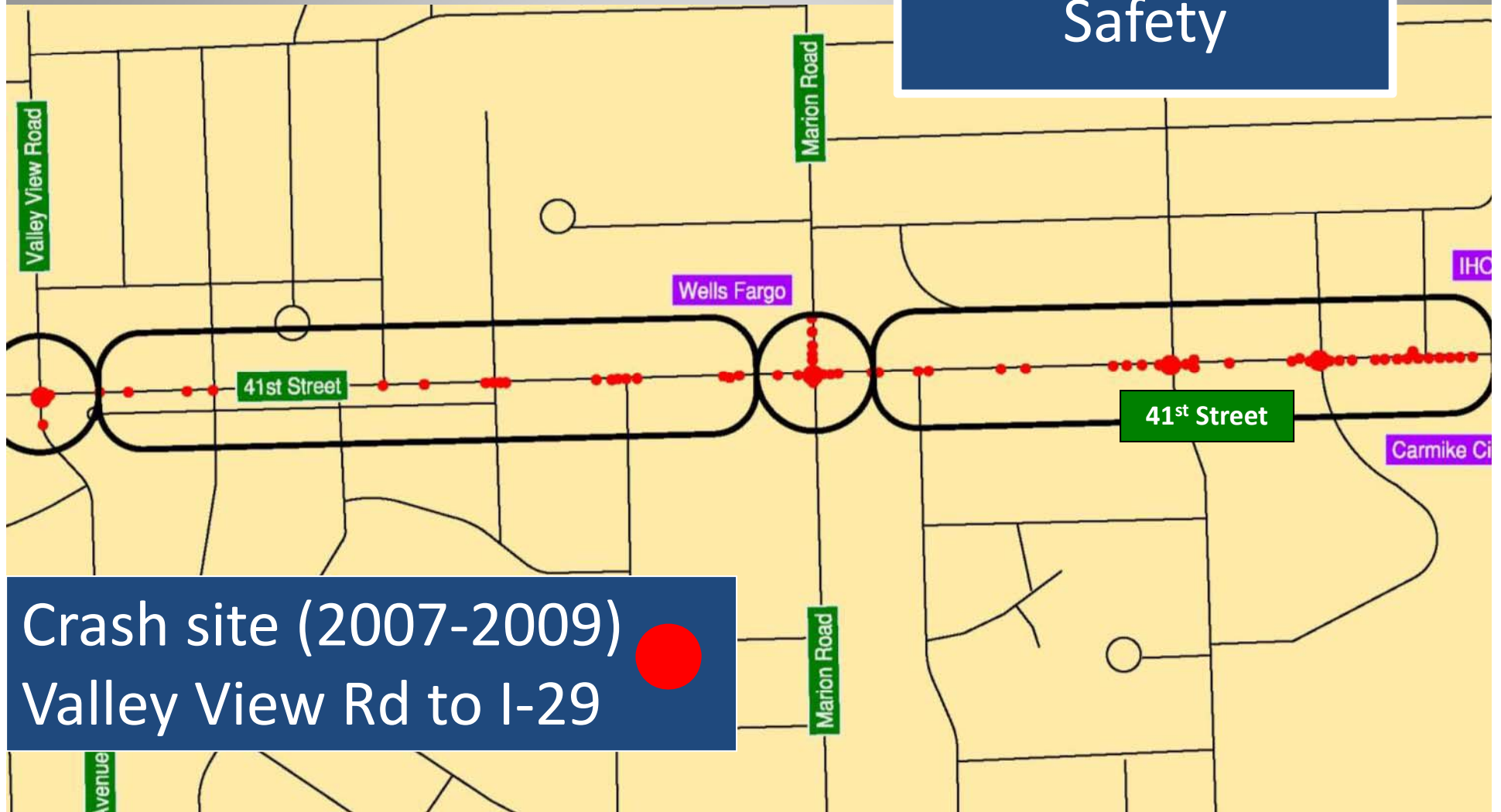
An aerial, high-angle view of a busy intersection. The road is filled with numerous vehicles, including cars, SUVs, and a white pickup truck. The traffic is moving in multiple directions, creating a complex pattern of movement. The surrounding area includes some buildings and trees in the background.

Capacity

Video clip (4x actual speed)
41st/Louise intersection

41st Street
Louise Avenue

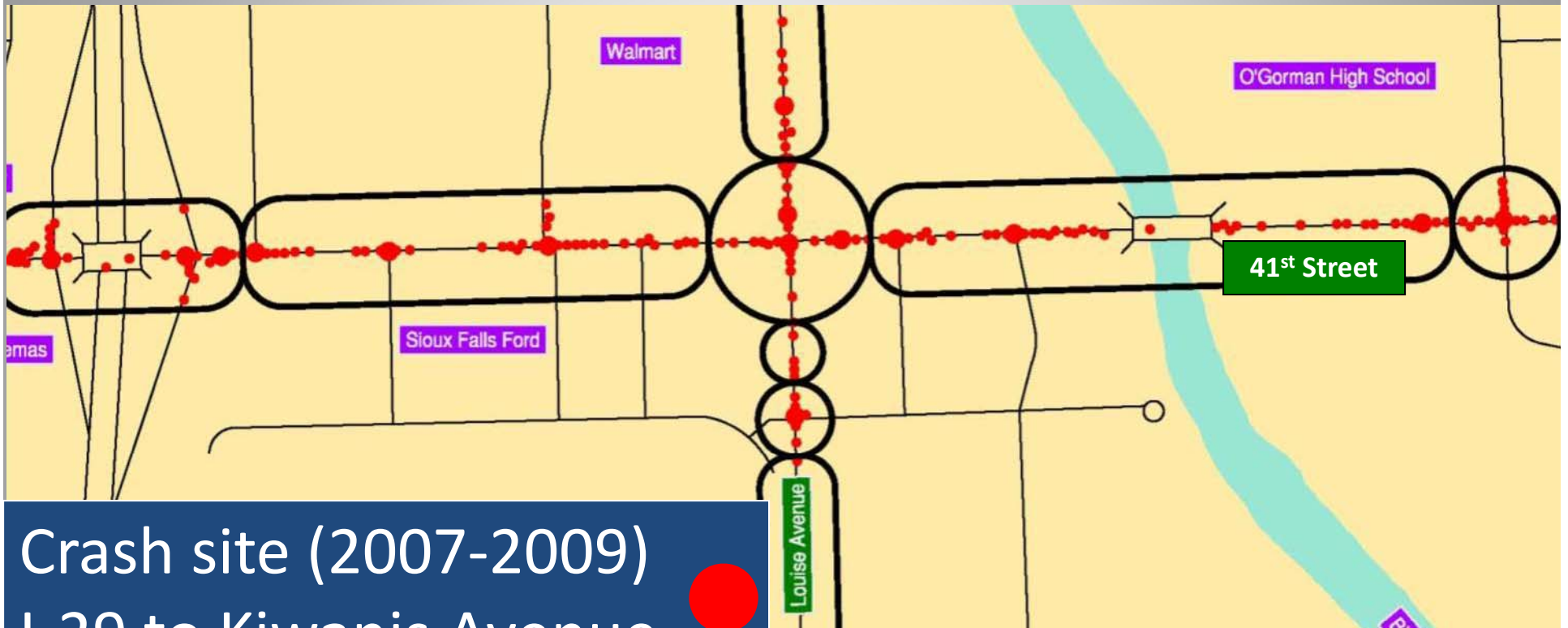
Safety



Crash site (2007-2009)
Valley View Rd to I-29

41st Street
Louise Avenue

Safety



Crash site (2007-2009)
I-29 to Kiwanis Avenue

41st Street
Louise Avenue

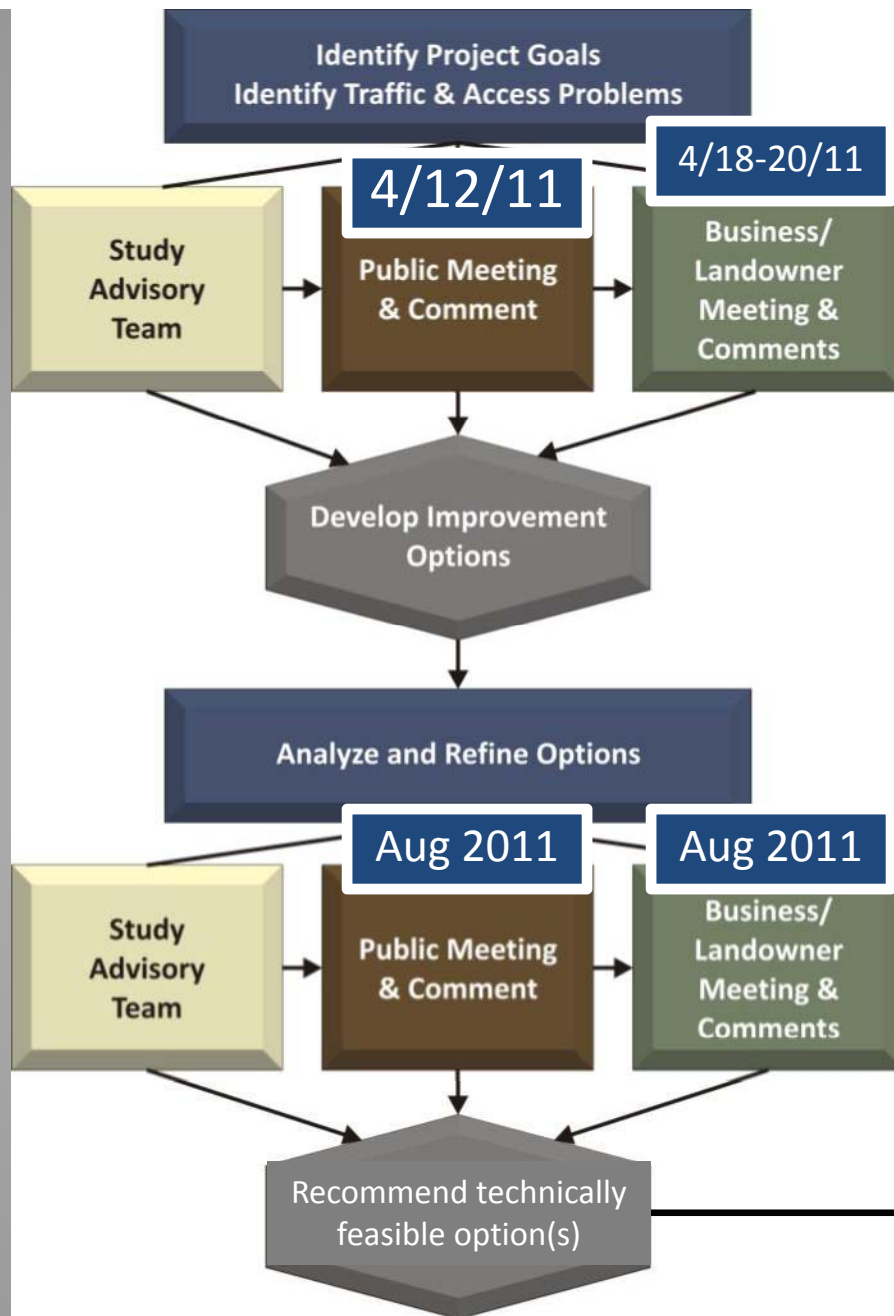
Safety



Crash site (2007-2009)
Louise Avenue

41st Street
Louise Avenue

Next Steps



Next Steps

Comments



Issues/Needs

Traffic Capacity

Safety

Access

Pedestrians/Bicyclists

Aesthetics

Solutions

Traffic Capacity

Safety

Access

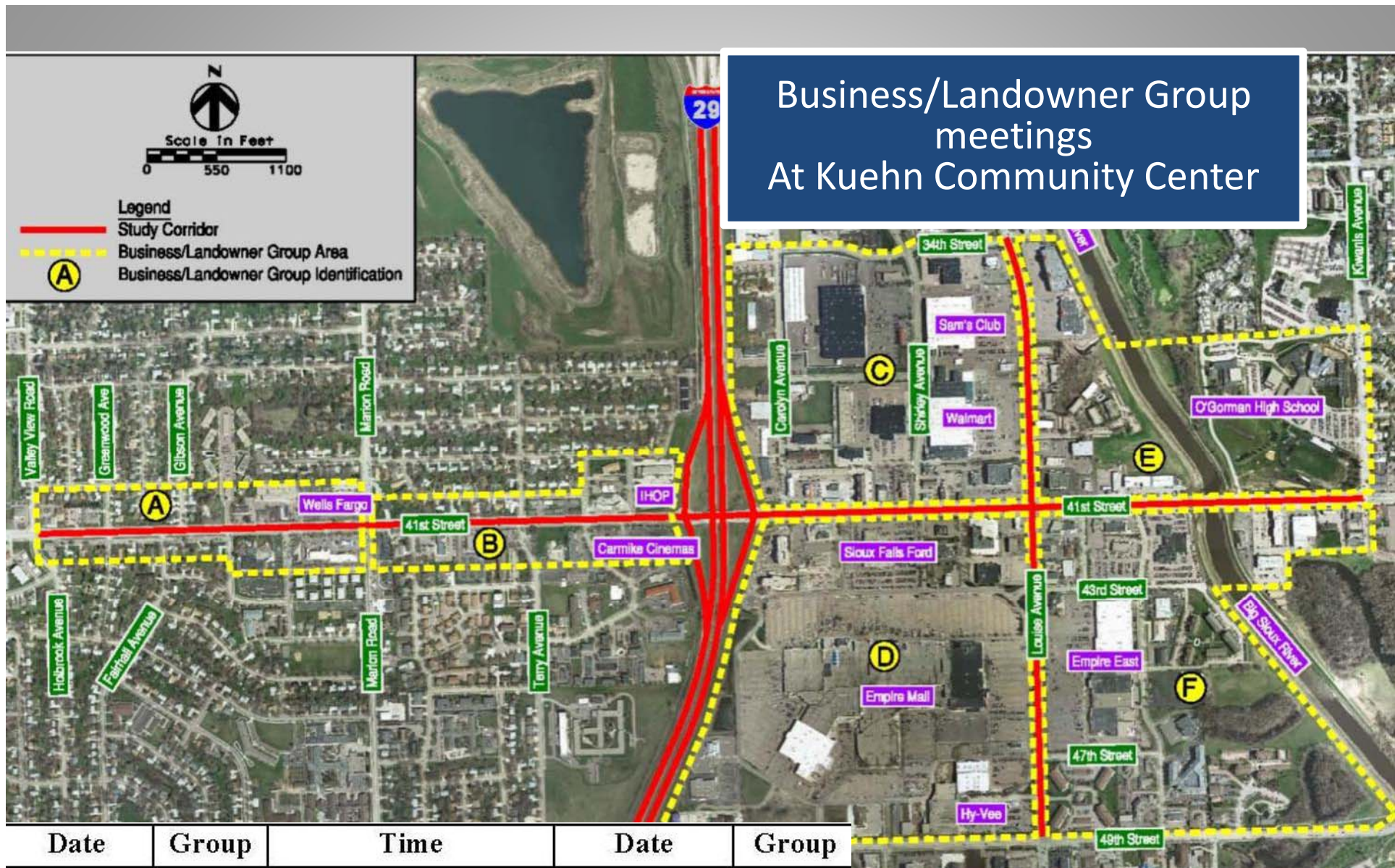
Pedestrians/Bicyclists

Aesthetics



Comment Sheet

Next Steps



Date	Group	Time	Date	Group
Monday April 18, 2011	A	8:00 to 9:30 am	Wednesday April 20, 2011	D
	B	10:30 am to 12:00 pm		E
	C	1:00 to 2:30 pm		F

Next Steps

Business/Landowner Group meetings

Preparation

To prepare for the public open house and the follow-up business/ landowner group meeting please:

1. Watch traffic flow on 41st Street and/or Louise Avenue near your business / property during peak traffic periods
2. Watch how vehicles enter and exit your site and note the difficulties they encounter
3. Watch how traffic circulates within your site
4. Observe difficulties that pedestrians encounter along 41st Street and Louise Avenue
5. Formulate specific ideas for improving:
 - Traffic flow on the roadways
 - Safety for drivers, pedestrians, and transit users
 - Access to and circulation within your business site or property

Next Steps

Information Sheet

Public meeting items
posted at web site



Information Sheet for Public Information Open House I-29 Exit 77 (41st Street) Crossroad Corridor Study April 12, 2011



Questions and Answers

Question: *What is the purpose of the study?*

Answer: The I-29 Exit 77 (41st Street) Crossroad Corridor Study will be a guidebook for roadway and access improvements over the next 5 to 20 years for 41st Street, Louise Avenue, and the I-29/41st Street interchange.

Question: *Why change the existing I-29 interchange at 41st Street?*

Answer: In the morning rush hour, eastbound 41st Street traffic often backs up to Marion Road. In the evening rush hour, the I-29 southbound off-ramp traffic often backs up onto I-29. These conditions lead to unacceptable delays and safety concerns for drivers. As traffic levels continue to increase, the traffic concerns at the 41st Street/I-29 ramp intersections will continue to worsen.

Question: *How can you improve the I-29/41st Street interchange?*

Answer: Different types of interchanges will be considered. Interchange types that efficiently handle large volumes of left-turning traffic. The single point interchange (e.g. I-29/12th Street) and the diverging diamond interchange are expected to fit within the existing roadway right-of-way and would efficiently handle the traffic at the I-29/41st Street interchange.

Question: *Why study the I-29 interchange and 41st Street and Louise Avenue?*

Answer: Page 2 of this Information Sheet shows the limits of the corridor study roadways. From a traffic perspective, all of these roadways tend to operate together as a system. Problems in one area generally affect the rest of the study area roadways. Likewise, improvements in one area would generally affect the rest of the study area roadways. So it makes sense for the study to include 41st Street from Valley View Road to Kiwanis Avenue and Louise Avenue from 49th Street to 34th Street.

Question: *Will previous studies be taken into account?*

Answer: The 2010 South Dakota Interstate Corridor Study identified options for improving the I-29/41st Street interchange; those options will be refined and analyzed in detail in this study. The recommendations from the 2000 41st Street Corridor Analysis will also be considered in this study.

Answer: The primary transportation related considerations will be roadway capacity, safety, and access.

Other considerations include pedestrians, transit, and aesthetics. The corridor study will identify where problems exist and options for improvements.

Question: *What is the timeframe for improvements?*

Answer: Reconstruction and expansion of I-29 from 26th Street to 57th Street begins this year (2011). At this point, there is no specific timeframe for any other significant improvements of study area roadways. The corridor study will identify the potential timeline and sequence for improvement options. Maintenance work on 41st Street and Louise Avenue will continue to be done in upcoming years to keep the driving surface in good condition.

Question: *Will any business access changes be considered in the transportation study?*

Answer: With all of the commercial land use along 41st Street and Louise Avenue, providing good access to businesses is a primary consideration. A goal of the study process is to work in partnership with business/landowners to identify existing access problems and feasible solutions to these problems.

Next Steps

April 18 and 20, 2011

Meet with business/landowner groups

April 26, 2011

Public meeting comments due

May to July 2011

Develop and analyze improvement options

August 2011

Public meeting #2

Meet with business/landowner groups

September to December 2011

Prepare draft corridor study

January 2012

Public meeting #3

March 2012

Prepare final corridor study

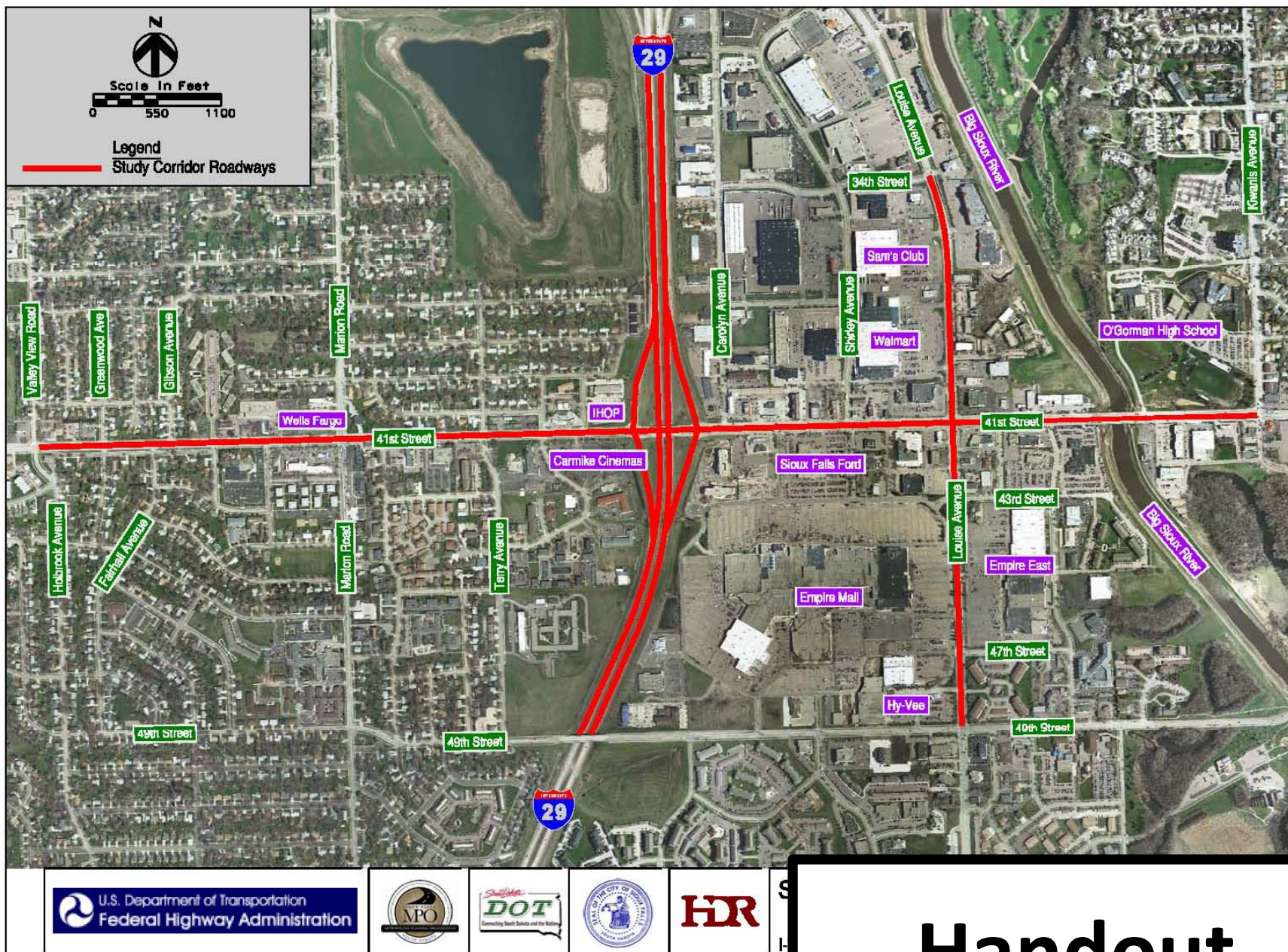
More Questions?

Contact:

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Phone: 773-6641	Phone: 977-7740	Phone: 367-8601

See also project web site at:

http://www.sddot.com/pe/projdev/planning_ss_I29Exit77.asp



Handout

Comment Card
I-29 Exit 77 (41st Street) Crossroad Corridor Study
Public Meeting/Open House
April 12, 2011

Comments:

Name: _____ Address: _____

Phone: _____

For your comments to be considered, please return by April 26, 2011.
Comments can also be e-mailed to: james.unruh@hdrinc.com

From: _____

PLACE
POSTAGE
HERE

*HDR, Inc.
6300 South Old Village Place, Suite 100
Sioux Falls, SD 57108*

ATTN: James Unruh

**Comment
Cards**

Questions and Comments

Thanks for your
attendance!!!